

/ Descriptions

Silicon NPN transistor in a TO-126F Plastic Package.

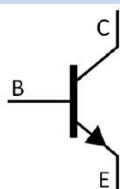
/ Features

Complementary pair with KSA1220(A).

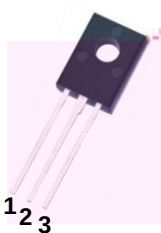
/ Applications

Audio frequency and high frequency power amplifier.

/ Equivalent Circuit



/ Pinning



PIN1 Emitter PIN 2 Collector PIN 3 Base

/ h_{FE} Classifications & Marking

h_{FE} Classifications Symbol	R	O	Y
h_{FE} Range	60 120	100 200	160 320

/ Absolute Maximum Ratings(Ta=25)

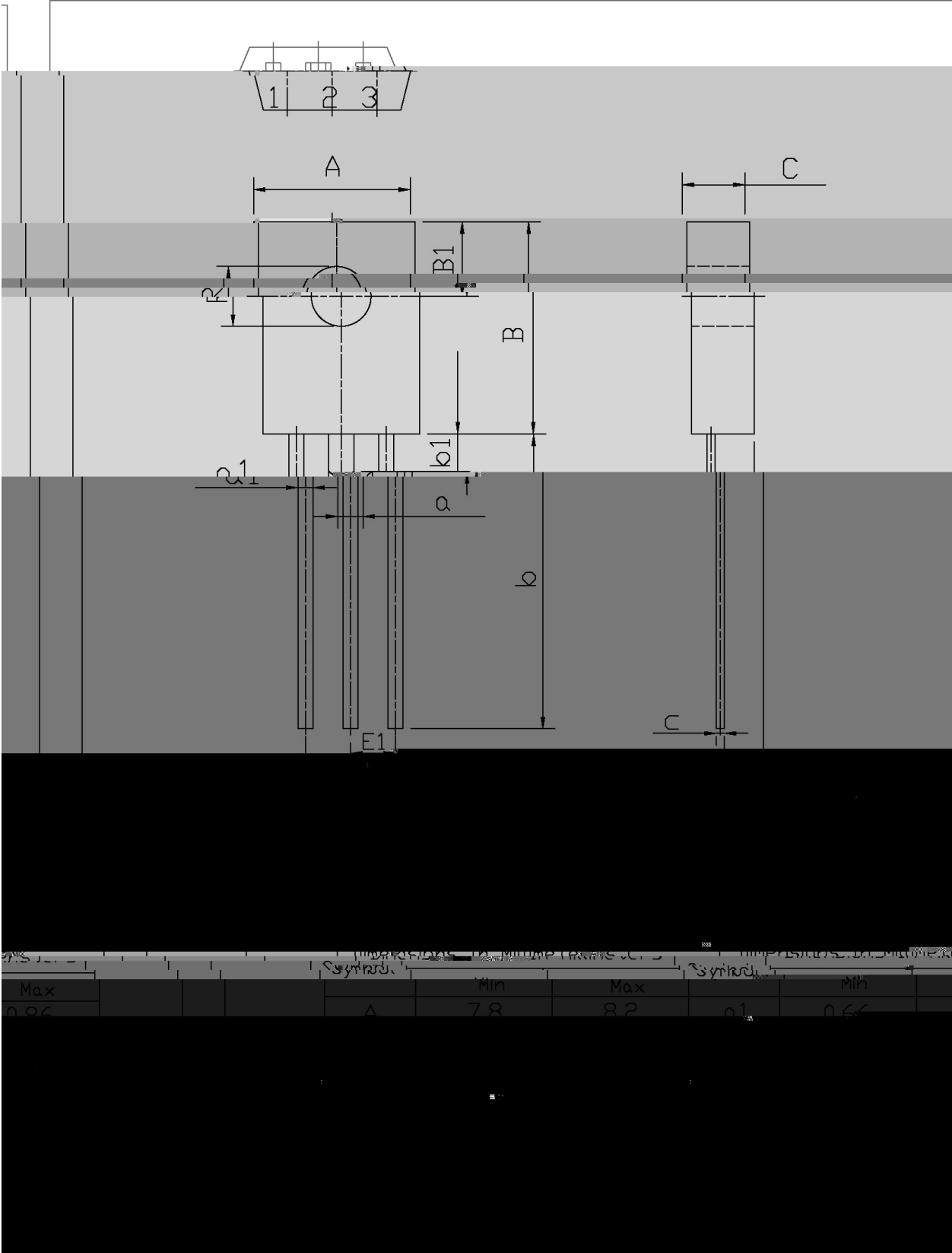
Parameter	Symbol	Rating	Unit
Collector to Base Voltage	V_{CBO}	KSC2690 120	V
		KSC2690A 160	
Collector to Emitter Voltage	V_{CEO}	KSC2690 120	V
		KSC2690A 160	
Emitter to Base Voltage	V_{EBO}	5.0	V
Collector Current - Continuous	I_C	1.2	A
Peak Collector Current – Continuous	I_{CM}	2.5	A
Collector Power Dissipation	P_C	1.2	W
Collector Power Dissipation	$P_C(T_c=25)$	20	W
Junction Temperature	T_j	150	
Storage Temperature Range	T_{stg}	-55 150	

/ Electrical Characteristics(Ta=25)

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Collector Cut-Off Current	I_{CBO}	$V_{CB}=120V$ $I_E=0$			1.0	μA
Emitter Cut-Off Current	I_{EBO}	$V_{EB}=3.0V$ $I_C=0$			1.0	μA
DC Current Gain	$h_{FE(1)}$	$V_{CE}=5.0V$ $I_C=0.3A$	60	140	320	
	$h_{FE(2)}$	$V_{CE}=5.0V$ $I_C=5.0mA$	35	105		
Collector to Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C=1.0A$ $I_B=0.2A$		0.4	0.7	V
Base to Emitter Saturation Voltage	$V_{BE(sat)}$	$I_C=1.0A$ $I_B=0.2A$		1.0	1.3	V
Transition Frequency	f_T	$V_{CE}=5.0V$ $I_C=0.2A$		155		MHz
Collector output capacitance	C_{ob}	$V_{CB}=10V$ $I_E=0$ $f=1.0MHz$		19		pF

/ Package Dimensions

单位: mm



Max	Min	Max	Min
0.86	7.8	8.2	0.66

/ Marking Instructions



Note:

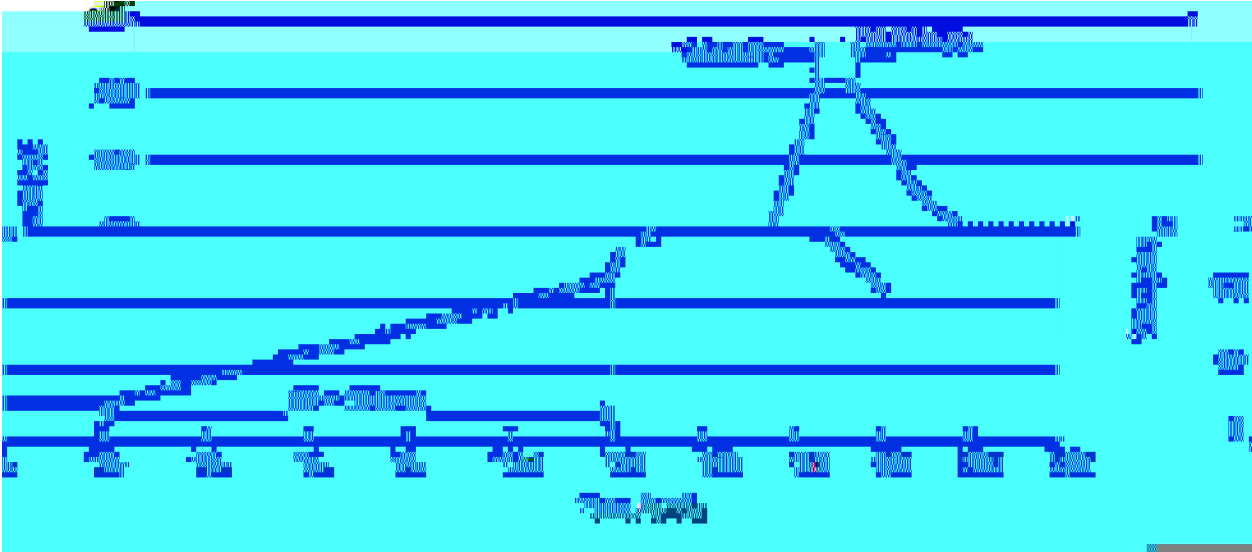
BR: Company Code

: Product Type.

O: h_{FE} Classifications Symbol

***: Lot No. Code, code change with Lot No.

() / Temperature Profile for Dip Soldering(Pb-Free)



Note:

- | | | | | | |
|---|-----|-----|----|---------|---|
| 1 | 25 | 150 | 60 | 90sec; | 1.Preheating:25~150 , Time:60~90sec. |
| 2 | 255 | 5 | 5 | 0.5sec; | 2.Peak Temp.:255 5 , Duration:5 0.5sec. |
| 3 | | 5 | | | |